IN THE CLAIMS

- 1. (currently amended) A vacuum pumping arrangement for controlling pressure in a chamber, the arrangement comprising: a molecular pumping mechanism and a backing pumping mechanism, saidthe backing pumping mechanism being rotatable by a motor, saidthe motor being arranged to rotate saidthe molecular pumping mechanism simultaneously with saidthe backing pumping mechanism, and control means for controlling the rotational speeds of the backing pumping mechanism and the molecular pumping mechanism.
- 2. (currently amended) A-The vacuum pumping arrangement as claimed in claim 1, wherein the molecular pumping mechanism and the backing pumping mechanism are arranged to be driven by a common drive shaft which is arranged to be driven by saidthe motor
- 3. (currently amended) A-<u>The</u> vacuum pumping arrangement as claimed in claim 1-or-2, wherein saidthe molecular pumping mechanism comprises <u>a</u> molecular drag pumping meansmechanism.
- 4. (currently amended) A-<u>The</u> vacuum pumping arrangement as claimed in claim 3, wherein saidthe molecular drag pumping means-mechanism comprises a Holweck pumping meansmechanism.
- 5. (currently amended) A-<u>The</u> vacuum pumping arrangement as claimed in claim 4, wherein a holweck cylinder of the Holweck pumping means-mechanism is formed from carbon fibre-fiber reinforced material.
- 6. (currently amended) A-<u>The</u> vacuum pumping arrangement as claimed in any one of the preceding claims laim 1, wherein said the molecular pumping mechanism comprising comprises a turbomolecular pumping means.
- 7. (currently amended) A-The vacuum pumping arrangement as claimed in any one of the preceding claims l, wherein the backing pumping mechanism is a regenerative pumping mechanism.

- 8. (currently amended) A-The vacuum pumping arrangement as claimed in any one of the preceding claims l, wherein the control means comprises means for measuring the pressure in the chamber, and means for changing the rotational speeds of the molecular pumping mechanism and the backing pumping mechanisms in dependence on the measured pressure.
- 9. (currently amended) A method of controlling pressure in a chamber connected to an inlet of a vacuum pumping arrangement comprising including a backing pumping mechanism and a molecular pumping mechanism, and a motor for driving saidthe backing pumping mechanism, the method comprising using saidthe motor to control rotation of saidthe molecular pumping mechanism thereby to controlling pressure in saidthe chamber.
- 10. (currently amended) A method as claimed in claim 9, wherein the backing pumping mechanism and the molecular pumping mechanism are coupled to a common drive shaft and the method comprises using the motor to control rotation of the common drive shaft thereby to-controlling pressure in saidthe chamber.
- 11. (new) A vacuum pumping arrangement as claimed in claim 3, wherein the molecular pumping mechanism comprises a turbomolecular pumping means.
- 12. (new) A vacuum pumping arrangement as claimed in claim 4, wherein the molecular pumping mechanism comprises a turbomolecular pumping means.
- 13. (new) A vacuum pumping arrangement as claimed in claim 6, wherein the backing pumping mechanism is a regenerative pumping mechanism.
- 14. (new) A vacuum pumping arrangement as claimed in claim 13, wherein the control means comprises means for measuring the pressure in the chamber, and means for changing the rotational speeds of the molecular pumping mechanism and the backing pumping mechanism in dependence on the measured pressure.
- 15. (new) A vacuum pumping arrangement as claimed in claim 11, wherein the backing

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pumping mechanism is a regenerative pumping mechanism.

16. (new) A vacuum pumping arrangement as claimed in claim 12, wherein the backing pumping mechanism is a regenerative pumping mechanism.